

# Safety Data Sheet

## SPIRIT 1 liquid





Safety Data Sheet dated 7/12/2015, version 3.7.1

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier  
Mixture identification:  
Trade name: SPIRIT 1 liquid  
Trade code: 11750/50
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Antirust, dewatering for machine, moulds and metal surface.
- 1.3. Details of the supplier of the safety data sheet  
Company:  
Strima Sp. z o.o.  
Swadzim, ul. Poznańska 54  
62-080 Tarnowo Podgórne  
Competent person responsible for the safety data sheet:  
mail@strima.com
- 1.4. Emergency telephone number  
Strima Sp. z o.o. +48 61 8950950

### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP)
-  Warning, Flam. Liq. 3, Flammable liquid and vapour.
  -  Danger, Asp. Tox. 1, May be fatal if swallowed and enters airways.
- EUH066 Repeated exposure may cause skin dryness or cracking.  
Adverse physicochemical, human health and environmental effects:  
No other hazards

- 2.2. Label elements  
Symbols:



- Danger  
Hazard statements:  
H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.
- Precautionary statements:  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing vapours.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
P331 Do NOT induce vomiting.  
P501 Dispose of contents/container in accordance with applicable regulations.
- Special Provisions:  
EUH066 Repeated exposure may cause skin dryness or cracking.  
The manufacturer cannot be held responsible in case of damages caused by incorrect use of the product.
- Contents  
Paraffinic hydrocarbons
- Special provisions according to Annex XVII of REACH and subsequent amendments:  
Restricted to professional users.
- 2.3. Other hazards  
vPvB Substances: None - PBT Substances: None
- Other Hazards:  
No other hazards

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Hazardous components within the meaning of CLP regulation and related classification:

>= 80% - < 90% Paraffinic hydrocarbons

REACH No.: 01-2119474199-26, Index number: 604-001-02-5, CAS: 124-18-5, EC: 204-686-4



2.6/3 Flam. Liq. 3 H226



3.10/1 Asp. Tox. 1 H304

>= 5% - < 7% 2-butoxyethanol

REACH No.: 01-2119475108-36, Index number: 603-014-00-0, CAS: 111-76-2, EC: 203-905-0



3.3/2 Eye Irrit. 2 H319



3.2/2 Skin Irrit. 2 H315



3.1/4/Oral Acute Tox. 4 H302



3.1/4/Dermal Acute Tox. 4 H312



3.1/4/Inhal Acute Tox. 4 H332

For the wording of the listed hazard statements refer to section 16.

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

#### 4.2. Most important symptoms and effects, both acute and delayed

None

#### 4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment: None

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons: None in particular.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### SECTION 6: Accidental release measures

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- 6.1. Personal precautions, protective equipment and emergency procedures  
Wear personal protection equipment.  
Remove all sources of ignition.  
Remove persons to safety.  
See protective measures under point 7 and 8.
- 6.2. Environmental precautions  
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.  
Retain contaminated washing water and dispose it.  
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.  
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up  
Wash with plenty of water.
- 6.4. Reference to other sections  
See also section 8 and 13

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### SECTION 7: Handling and storage

- 7.1. Precautions for safe handling  
Do not use near fire or other possible sources of ignition. During work phase do not smoke.  
Avoid contact with skin and eyes, inhalation of vapours and mists.  
Don't use empty container before they have been cleaned.  
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.  
Contaminated clothing should be changed before entering eating areas.  
Do not eat or drink while working.  
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities  
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.  
Avoid accumulating electrostatic charge.  
Keep away from food, drink and feed.  
Incompatible materials:  
None in particular. See also section number 10  
Instructions as regards storage premises:  
Cool and adequately ventilated.  
Safety electric system.
- 7.3. Specific end use(s)  
None in particular

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### SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters  
Paraffinic hydrocarbons - CAS: 124-18-5  
TLV TWA - 1200 mg/m<sup>3</sup> (8h)  
2-butoxyethanol - CAS: 111-76-2  
EU - LTE(8h): 98 mg/m<sup>3</sup>, 20 ppm - STE: 246 mg/m<sup>3</sup>, 50 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography)  
ACGIH, 20 ppm - Notes: A3, BEI - Eye and URT irr
- DNEL Exposure Limit Values  
2-butoxyethanol - CAS: 111-76-2  
Consumer: 13.4 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects  
Worker Industry: 89 mg/kg - Consumer: 44.5 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects  
Worker Industry: 663 19141.03 - Consumer: 426 19141.03 - Exposure: Human Inhalation - Frequency: Short Term, systemic effects
- PNEC Exposure Limit Values  
2-butoxyethanol - CAS: 111-76-2  
Target: Marine water - Value: 0.88 mg/l  
Target: Fresh Water - Value: 8.8 mg/l  
Target: Microorganisms in sewage treatments - Value: 463 mg/l  
Target: Marine water sediments - Value: 3.46  
Target: Freshwater sediments - Value: 34.6 mg/kg
- 8.2. Exposure controls  
Eye protection:  
Wear goggles with lateral protection EN166 .  
If exposure to vapours cause a sense of bother to eyes, use antigas mask with complete facial.

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### Protection for skin:

It is not necessary in case of brief contact except for wearing antistatic clean and covering garments.  
In case of long and frequent contact use protective and waterproof garments to this material.  
Choosing specific protection as peak, gloves, boots, overalls depends on the type of operations.

### Protection for hands:

During normal manipulation it is not necessary a particular protection.  
In case of frequent contacts protect hands with gloves resistant to solvents (PVC,PE, neoprene, not natural rubber).

### Respiratory protection:

The levels of air concentration should be maintained under the exposure limits. If inhalation are over exposure limit use a supplied air respirator with cartridge filter. Filter type EN 141.

### Thermal Hazards:

None

### Environmental exposure controls:

Keep the container and use the product only in well ventilated place. A located ventilation may be necessary for some operations.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance and colour:	Amber clear liquid
Odour:	Odorless
Odour threshold:	N.A.
pH:	N.A.
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	170-180 °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	L.E.L/U.E.L. 0,6-7%
Vapour density:	>1
Flash point:	50 ° C
Evaporation rate:	N.A.
Vapour pressure:	0,2 KPa (a 20°C)
Relative density:	0,76 g/ml (a 25°C)
Solubility in water:	No
Solubility in oil:	Yes
Partition coefficient (n-octanol/water):	6
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	1 mm <sup>2</sup> /s
Explosive properties:	N.A.
Oxidizing properties:	N.A.

### 9.2. Other information

Miscibility:	N.A.
Fat Solubility:	N.A.
Conductivity:	N.A.
Substance Groups relevant properties	N.A.

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

### 10.2. Chemical stability

### 10.3. Possibility of hazardous reactions

None

### 10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

### 10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

### 10.6. Hazardous decomposition products

None.

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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Toxicological information of the mixture:

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N.A.

Toxicological information of the main substances found in the mixture:

Paraffinic hydrocarbons - CAS: 124-18-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: OECD TG401

Test: LC50 - Route: Inhalation - Species: Rat > 5000 mg/m<sup>3</sup> - Duration: 8h - Source: OECD TG403

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: OECD TG402

b) skin corrosion/irritation:

Test: Skin Corrosive - Route: Skin - Species: Rabbit Negative

c) serious eye damage/irritation:

Test: Eye Corrosive - Species: Rabbit Negative

2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve - CAS: 111-76-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Paraffinic hydrocarbon - CAS: 124-18-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 100 mg/l - Duration h: 96 - Notes: Oncorhynchus Mykiss (Trotta iridea)

Endpoint: EC50 - Species: Daphnia > 100 mg/l - Duration h: 48 - Notes: Daphnia Magna

Endpoint: EC50 - Species: Algae > 100 mg/l - Duration h: 72 - Notes: Pseudokirchneriella subcapitata

2-butoxyethanol - CAS: 111-76-2

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 1474 mg/l - Duration h: 96 - Notes: Oncorhynchus mykiss

Endpoint: EC50 - Species: Daphnia = 1550 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 911 mg/l - Duration h: 72 - Notes: Pseudokirchnerella subcapitata

#### 12.2. Persistence and degradability

None

N.A.

#### 12.3. Bioaccumulative potential

N.A.

#### 12.4. Mobility in soil

N.A.

#### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

#### 12.6. Other adverse effects

None

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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### SECTION 14: Transport information

#### 14.1. UN number

ADR-UN number: 1139

IATA-Un number: 1139

IMDG-Un number: 1139

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14.2. UN proper shipping name	
ADR-Shipping Name:	Protettivi in soluzione
IATA-Technical name:	Protettivi in soluzione
IMDG-Technical name:	Protettivi in soluzione
N.A.	
14.3. Transport hazard class(es)	
ADR-Class:	3
ADR-Label:	3
ADR - Hazard identification number:	F1
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3
N.A.	
14.4. Packing group	
ADR-Packing Group:	III
N.A.	
14.5. Environmental hazards	
Marine pollutant:	No
N.A.	
14.6. Special precautions for user	
ADR-Tunnel Restriction Code:	D/E
IMDG-Technical name:	Protettivi in soluzione
N.A.	
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
N.A.	

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### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)  
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Dir. 2006/8/EC  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013, Regulation (EU) n. 453/2010 (Annex I)  
Regulation (EU) n. 286/2011 (ATP 2 CLP), Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP), Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: None  
Where applicable, refer to the following regulatory provisions :  
Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.  
Regulation (EC) nr 648/2004 (detergents).  
1999/13/EC (VOC directive)
- Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II): N.A.
- 15.2. Chemical safety assessment  
No

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### SECTION 16: Other information

- Full text of phrases referred to in Section 3:  
H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.  
H315 Causes skin irritation.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.
- Classification of substances according to 1272/2008/CE (CLP-GHS) and further ATP and Regulation 790/2009/CE.  
SDS drafted in accordance with 1907/2006/CE REACH and 453/2010/CE.  
Main bibliographic sources:

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ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold  
CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.